ADVC-55

Advanced DV Converter

User Manual

January 6, 2004
Part No: F157312111

canopus

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Warranty

Your ADVC-55 options are covered by a limited warranty when you register your Canopus unit. This warranty is for a period of three years from the date of purchase from Canopus or an authorized Canopus agent. This warranty applies only to the original purchaser of the Canopus unit and is not transferable. Canopus Co., Ltd. warrants that for this period the unit will be in good working order. Should our unit fail to be in good working order, Canopus will, at its option, repair or replace it at no additional charge, provided that the unit has not been subjected to misuse, abuse or non-Canopus authorized alterations, modifications and/or repair. Proof of purchase is required to validate your warranty.

Canopus Co., Ltd. is not responsible for any lost profits, lost savings or other incidental or consequential damages arising out of the use of, or inability to use, this unit. This includes damage to property and, to the extent permitted by law, damages for personal injury. This warranty is in lieu of all other warranties of merchantability and fitness for a particular purpose.

REPLACEMENT OF DAMAGED PARTS (NOT THOSE DUE TO MANUFACTURING DEFECTS) WILL BE CHARGED AT ACTUAL COST PLUS HANDLING FEES.

Safety and Regulatory Notice

Please observe the followings when using this unit. If you have any questions regarding the descriptions herein, or any other concerns, please contact your local Canopus office or distributor.

WARNING

The following conditions indicate the potential for serious bodily injury or loss of life.

Do not disassemble

Do not remove the cover or modify this unit. Fire, electric shock or malfunction may result. For internal inspection or repair, please contact your local Canopus office or distributor.

Do not use in a dusty or wet environment

It may cause a short-circuit or a build-up of heat, resulting in fire or electric shock.

Do not use in environments requiring a high degree of reliability and safety

This unit is not to be used in medical devices or life support systems. The characteristics of this unit are not suited for use with such systems.

Do not place the unit close to heat sources

Do not place in an area exposed to direct sunlight or near a heating apparatus. The heat can accumulate, causing burns, fire or damage. Also, the unit may become deformed or change color.

Stop using when the unit is smoking

Do not use this unit in an abnormal condition like when it is smoking or emitting an odor. It may result in fire or malfunction. If any anomaly is found, turn off the power of computer and disconnect the cable from the unit.

Do not drop this unit nor use this unit in a damaged condition

Do not drop this unit nor use this unit with its cover broken. It may result in fire or malfunction. In case this unit is damaged, turn off the power of computer, disconnect the cable from the unit, and contact your local Canopus office or distributor.

Health precautions

In rare cases, flashing lights or stimulation from the bright light of a computer monitor display may trigger temporary epileptic seizures or loss of consciousness. It is believed that even individuals whom have never experienced such symptoms may be susceptible. If you or your close relatives have experienced any of these symptoms, consult a doctor before using this unit.

CAUTION

The following conditions indicate the potential for bodily harm, damage to hardware or loss of data.

Do not place on an unstable place

Do not place this unit on an unstable table or slanted surface. This unit may fall from it, resulting in injuries or malfunction.

Do not use other than the described method

Do not use in a manner other than described. Do not use while wrapped in cloth or plastic. Heat can accumulate, causing burns, fire or damage.

FCC Notice

This unit has been tested and found to comply with the limits for the class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential installation.
This unit generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Declaration of conformity

According to FCC Part 15
Responsible Party Name: Canopus Co., Ltd.
Address: 1-2-2 Murotani Nishi-ku, Kobe-city Hyogo 651-2241 Japan
Telephone: +81-78-992-5846
Declares that unit model: ADVC-55
Complies with Part 15 of the FCC Rules.

Product Notes

(1) Unauthorized copying of a portion or the entirety of this unit is prohibited.
(2) The description and specifications of this unit are subject to future change without notice.
(3) The description of this unit has been prepared to be as complete as possible. If the purchaser is aware of any questionable points, errors or omissions, please contact Canopus Co., Ltd.
(4) Canopus Co., Ltd. assumes no liability for the results of practical application, regardless of item (3) above.
(5) Regardless of whether negligence occurs during usage, Canopus Co., Ltd. assumes no liability, even if there is a claim for extraordinary, incidental or derivative loss, including the loss of profits, that arise during practical application of this unit.
(6) The analysis, reverse engineering, recompiling and disassembling of the software, hardware or manuals that accompany this unit, and all other related units including miscellaneous supplemental items, are prohibited.
(7) Canopus, as written in both English and Japanese, and its logo are registered trademarks of Canopus Co., Ltd.
(8) ADVC is a trademark of Canopus Co., Ltd.
(9) i.LINK is a trademark of Sony Corporation, and FireWire is a trademark of Apple Computer Inc. In this document, both i.LINK and FireWire are referred to as "IEEE1394".
(10) Other product names and related items are trademarks or registered trademarks of their respective companies.

About the Documentation

This document is for ADVC-55. Information not listed in this document may be listed elsewhere. In cases where there is a difference between a description in this document and an actual operation method, the actual operation method takes precedence.
To simplify the descriptions, the actual unit may differ from the illustrations.

ADVC-55

Advanced DV Converter

Introduction

Key Benefits of ADVC-55

Realtime Analog to DV Converter

Canopus's proprietary DV technologies provide the best picture quality preservation. With our proven hardware DV codec, the ADVC-55 is the easiest solution for converting your S-VHS and Hi8 analog tapes to DV in realtime. There is no need for any driver installation or difficult settings.

NTSC, PAL, and SECAM Compatible*

There are 3 main television standards in use throughout the world. The system used in America and Canada is called "NTSC". Western Europe and Australia use a system called "PAL", and Eastern Europe and France use "SECAM". ADVC-55 allows to convert video data recorded in any environments.

* : ADVC-55 can not perform cross conversion (NTSC to PAL or vise versa, for instance).

Bus-Powered IEEE1394

This plug-and-play unit works with a small amount of electrical power supplied from 6-pin IEEE1394 bus connector of your computer through IEEE1394 cable. No external power supply is needed.* Compact design without AC adapter makes this unit handy and portable.

* : Bus-Powered IEEE1394 functions only when your computer has 6-pin IEEE1394 port and has capability of providing power.

Audio Input Gain

While monitoring converted video data, you may feel audio level is rather lower than expected. If so, the ADVC-55's Audio Input Gain function may solve the problem. There is however, a possibility that the sound may be distorted when the audio signal is over a certain level.

Package Contents

The product package includes the following accessories.

[ ] 1 x ADVC-55 unit
[ ] 1 x IEEE1394 cable* (6-pin - 6-pin)
[ ] 1 x User Manual (This document)

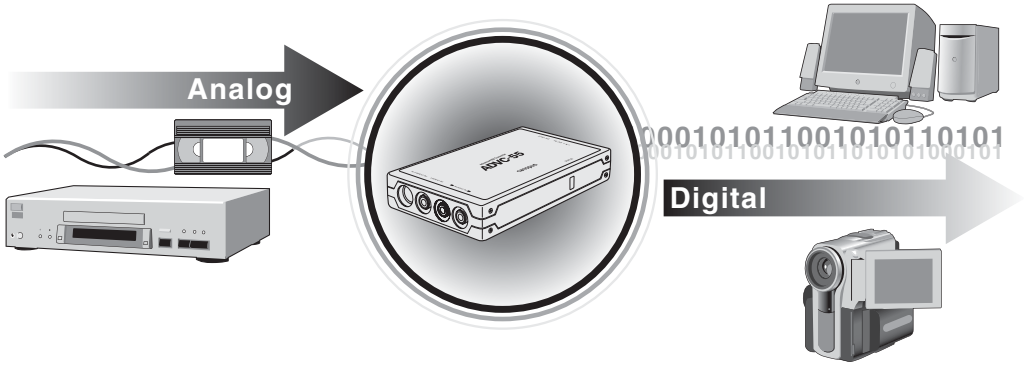
* : When your computer has only 4-pin IEEE1394 port, the 6-pin - 4-pin IEEE1394 cable is required (included with the optional AC adapter).

Technical Specifications

Primary Function	Realtime analog to DV conversion
Power Supply * Option	5V to 40V / 80mA to 620mA (Supplied from IEEE1394 bus connector**)
Power Usage	Approx. 3.1W
DV Output	6-pin i.LINK connector
Analog Input	S-Video In: 4-pin miniDIN Video In: RCA Pin jack (Yellow) Audio In (R): RCA Pin jack (Red) Audio In (L): RCA Pin jack (White)
Video Formats (TV System)	NTCS / PAL / SECAM***
Audio Formats	2-channel 48kHz 16-bit
Unit Dimensions	W 126 x D 76 x H 23 mm / 5 x 3 x 1 inch (Protrusions excluded)
Ambient Temperature	Celsius: 0 to 40 / Fahrenheit: 32 to 104 (No condensation)

** : Optional AC adapter is also available. (See Page 16.)

*** : ADVC-55 also accepts SECAM video (input only).



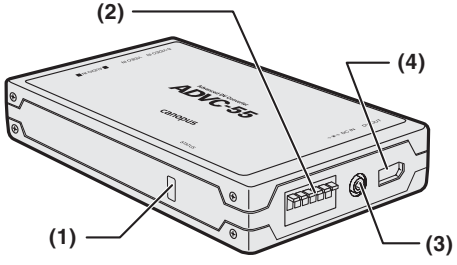
ADVC-55

Advanced DV Converter

Installation and Operation

Connection Ports

Front/Right-Side



(1) Status Indicator

(2) DIP Switches*

(3) Power Input Jack**

(4) IEEE1394 OUT Port (6-pin)

* : Refer to "Setting DIP Switches" on Page 13.

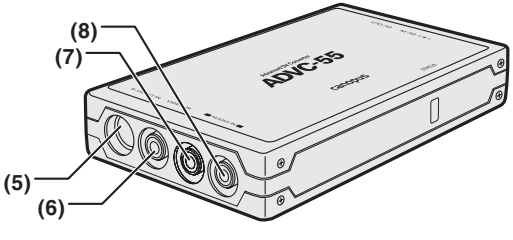
** : AC adapter is optionally available. (Do not operate with AC adapter other than the provided.)

Status Indicator

Status indicator shows the present condition of conversion. When it illuminates green, DV stream output from IEEE1394 port is detected. When it illuminates red;

- ADVC-55 is supplied power from computer.
- ADVC-55 ceases DV stream output receiving a deck-halt command from computer.
- ADVC-55 can not produce normal DV stream output because of excess fluctuations of synchronization signals.
- ADVC-55 detects macrovision signals from video deck.

Left-Side



(5) S-Video IN Port

(6) Video IN Port

(7) Audio (L) IN Port

(8) Audio (R) IN Port

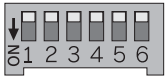
NOTE:

ADVC-55 first detects S-Video input if both S-Video IN and Video IN port are connected and used at the same time.

Setting DIP Switches*

Use the DIP switches on the right side of the unit to modify the ADVC-55's functionality. Each setting should be set before this unit is turned on. Setting of Audio Input Level can be switched during operation.

* : All the switches have been set to OFF at the time of shipment. No.1 and No.2 may differ depending on your point of purchase.



No	MODE	OFF	ON
1	Video Format	NTSC	PAL
2	NTSC Setup Level (No.1 = OFF) PAL/SECAM (No.1 = ON)	0 IRE PAL	7.5 IRE SECAM
3	Audio Input Level	0dB	+15dB
4	Reserved		
5	Reserved		
6	Reserved		

Video Format:

Toggles between capturing NTSC and PAL video format. When you convert video data recorded under SECAM system, set No.1 switch to the ON (PAL) position and set No.2 switch to ON as well.

NTSC Setup Level:

Toggles between 0 IRE and 7.5 IRE when No.1 switch is set to the OFF position. NTSC Setup (output black level) setting is available only for NTSC.

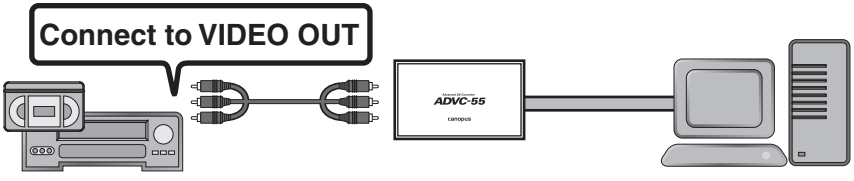
Audio Input Level:

When you feel converted sound is rather lower (smaller) than expected, set No.3 switch to the ON position. It may make the sound larger. There is however, a possibility that the sound may be distorted when the audio signal is over a certain level.

Converting Analog Video to Digital Video

Capturing analog video data with computer

To capture analog video data with computer, connect the video deck to your computer as follows. When your computer has only 4-pin IEEE1394 port, you will need a 6-pin-4-pin IEEE1394 cable (included with the optional AC adapter package).



1 Press deck PLAY button to play images you want to capture.

2 Begin capturing with an editing application on your computer (click on RECORD or Capture button).

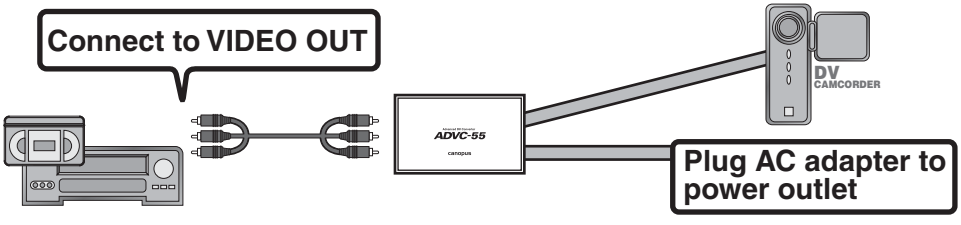
Refer to manual attached with the application on detail instructions of how to capture images.

NOTE:

Do not unplug the IEEE1394 cable while capturing or previewing with the editing application, or images will not be displayed on screen.

Dubbing analog video data on DV Camcorder

To copy analog video data on DV Camcorder, video deck and DV Camcorder are connected as follows. For copying analog data to digital data with DV Camcorder, you are required to use the optional AC adapter for power. (Please use the AC adapter provided as an option. See Page 16.)



1 Press RECORD and PAUSE button in order on your DV Camcorder.

2 Press deck PLAY button to play images you want to copy.

3 Press PAUSE button on your DV Camcorder to release the pause state.
Analog video data is being dubbed onto your DV Camcorder.

Optional AC Adapter Connection

An optionally available AC adapter is connected as follows. The AC adapter includes a 6-pin - 4-pin IEEE1394 cable. You may use this IEEE1394 cable only when your computer does not have any 6-pin IEEE1394 ports or when the Bus-Powered IEEE1394 does not function.